

CLAIMS

1. A method to reduce noise of a substrate comprising applying a noise-reducing coating material at an add-on rate of at least about three grams per square meter to a target region of a first surface of a substrate so as to substantially completely coat said target area, said noise-reducing coating material comprising a polymeric material.
2. The method of Claim 1 wherein said target region has an area which is at least about 50% of a surface area of said first surface.
3. The method of Claim 1 wherein said add-on rate is at least about four grams per square meter.
4. The method of Claim 1 wherein said noise-reducing coating material consists essentially of at least one of polyisoprene, polybutadiene, polyisobutylene, polyurethanes, silicone rubber, atactic polypropylene, and a synthetic block co-polymer.
5. The method of Claim 1 wherein said noise-reducing coating material consists essentially of at least one of styrene block co-polymers and olefin-based adhesives.
6. The method of Claim 1 wherein said substrate comprises a thermoplastic, polymeric film.
7. The method of claim 6 wherein said substrate is non-elastomeric.
8. The method of claim 6 wherein said substrate comprises at least one of polyethylene and polypropylene.

9. The method of claim 1 wherein applying said noise-reducing coating material comprises slot-coating said noise-reducing coating material.

10. A reduced-noise composite material comprising:

a substrate layer which defines a first surface having a surface area and a target area; and

a noise-reducing layer which substantially completely coats said target region, said noise-reducing layer having a basis weight of at least about three grams per square meter.

11. The reduced-noise composite material of Claim 10 wherein said target region is at least about 75% of said surface area of said first surface.

12. The reduced-noise composite material of Claim 10 wherein said basis weight is at least about four grams per square meter.

13. The reduced-noise composite material of Claim 10 wherein said noise-reducing layer consists essentially of at least one of polyisoprene, polybutadiene, polyisobutylene, polyurethanes, silicone rubber, atactic polypropylene, and a synthetic block co-polymer.

14. The reduced-noise composite material of Claim 10 wherein said noise-reducing layer consists essentially of at least one of styrene block co-polymers and olefin-based adhesives.

15. The reduced-noise composite material of Claim 10 wherein said substrate layer comprises a thermoplastic, polymeric film.

16. The reduced-noise composite material of Claim 15 wherein said substrate layer is non-elastomeric.

17. The reduced-noise composite material of Claim 15 further comprising a nonwoven layer adhered to said substrate layer.

18. The reduced-noise composite material of Claim 15 wherein said substrate layer comprises at least one of polyethylene and polypropylene.

19. The reduced-noise composite material of Claim 15 wherein said substrate layer is liquid-impermeable.

20. The reduced-noise composite material of Claim 15 wherein said substrate layer is non-apertured.

21. A disposable absorbent article comprising:

a body-side liner;

a garment-side outer cover, said outer cover comprising:

a liquid-impermeable substrate layer comprised of a thermoplastic, polymeric material and which defines a first surface having a surface area and a target area; and

a noise-reducing layer which substantially completely coats said target region, said noise-reducing layer having a basis weight of at least about three grams per square meter;

and

an absorbent assembly disposed between said body-side liner and said garment-side outer cover.

22. The disposable absorbent article of claim 21 wherein said target region has an area which is at least about 50% of said surface area of said first surface.
23. The disposable absorbent article of claim 21 wherein said target region has an area which is at least about 75% of said surface area of said first surface.
24. The disposable absorbent article of claim 21 wherein said basis weight is at least about four grams per square meter.
25. The disposable absorbent article of claim 21 wherein said noise-reducing layer consists essentially of at least one of polyisoprene, polybutadiene, polyisobutylene, polyurethanes, silicone rubber, atactic polypropylene, and a synthetic block co-polymer.
26. The disposable absorbent article of claim 21 wherein said noise-reducing layer consists essentially of at least one of styrene block co-polymers and olefin-based adhesives.
27. The disposable absorbent article of claim 21 wherein said substrate layer comprises a thermoplastic, polymeric film.
28. The disposable absorbent article of claim 27 wherein said substrate layer is non-elastomeric.
29. The disposable absorbent article of claim 27 further comprising a nonwoven layer.
30. The disposable absorbent article of claim 27 wherein said substrate layer comprises at least one of polyethylene and polypropylene.
31. The disposable absorbent article of claim 27 wherein said substrate layer is non-apertured.

32. A disposable absorbent article comprising:

a body-side liner;

a garment-side outer cover, said outer cover comprising a liquid-impermeable substrate layer comprised of a

thermoplastic, polymeric material and which defines a first surface having a surface area; and

an absorbent assembly disposed between said body-side liner and said garment-side outer cover,

wherein the article has a Noise Level of less than 30.0 dB at 2 kHz and less than 28.0 dB at 4 kHz.

33. The disposable absorbent article of claim 32, further comprising a noise-reducing layer which substantially completely coats a target region of said first surface, the target region having an area which is at least about 50% of said surface area;

said noise-reducing layer having a basis weight of at least about three grams per square meter.

34. The disposable absorbent article of claim 33 wherein said noise-reducing layer consists essentially of at least one of polyisoprene, polybutadiene, polyisobutylene, polyurethanes, silicone rubber, atactic polypropylene, and a synthetic block co-polymer.

35. The disposable absorbent article of claim 32 wherein said substrate layer comprises a non-elastomeric thermoplastic, polymeric material.

36. The disposable absorbent article of claim 35 further comprising a nonwoven layer adhered to said substrate layer.